

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

6271 1934

Native Plants

Selected Especially for

Rock Gardens

Cultural Information
*Including Brief Description
of Plant's Habitat*



John H. Heckner
Collector and Grower
Brownsboro, Ore.

FORGET-ME-NOTS

(By J. H. H.)

Under each item listed herein the plant's original habitat and its needs are briefly stated. Instructions given must be modified in localities where climatic extremes prevail. The further South plants are moved the more shade they need. In London's fog and rain they require no shade—that is why English authors are often misleading to the unwary.

About half of our western plants, including bulbs, attain their best development among rocks, variously shaded by trees or shrubs.

Alpines and subalpines are best kept hungry; they can't stand rich food, poor drainage or retentive soil near crowns. Mulch them with crushed rock or creek gravel. "Alpine" as used herein refers to plants which grow above timberline. "Subalpine," to plants from high altitudes.

Woodland plants usually thrive in rich sandy loam, more or less acid. Forest mold or peat mull for mulching these.

Rock Gardens which have shaded areas, wet and dry sections, and sunny spots, allow great range in variety. Any *one* soil mixture, or *one-way-for-all* methods are *not* for wildlings.

Many dry-land plants are slow in making root growth. Thorough watering is necessary until they are well established.

In addition to ordinary garden problems the rock-bog-scrree-etc garden requires knowledge of various soils—acid, neutral, alkaline—and there's need of a few books to explain the effect of certain minerals. The limit is—all yours.

PERENNIAL WILD FLOWERS

ALPINES, BULBS AND FERNS

Natives of Oregon and northern California. Nursery grown. All propagating stock is collected personally in the wilds, then "tamed" in my semi-wild rock garden nursery. Plants which prove adaptable--and desirable--are listed.

DELIVERIES AND PRICES

Most of the plants can be safely moved during early spring as well as in autumn. A few items marked "fall only" are shipped dormant. These are dead-looking, perhaps brittle in some species, but fear not, they will revive. Delivery in good condition is guaranteed. No unauthorized substitutions. Notice of shipping date will be forwarded in advance. First come, first served.

Postpaid Prices: A few plants are priced separately, all others 30c each; 3 of one kind, 60c; 6 of one kind \$1.10; 12 one kind \$2; 12 mixed \$3. Remittance must accompany order.

Anemone deltoidea. Windflower. Single large white flower. Three-parted leaf. Height, 7 in. Conifer forests, in rich leaf mold. Likes a cool location.

A. drummondii. Large white, or tinted, with finely cut foliage. Subalpine. 12 in. Fall only. Cold, moist, open, north slopes at 6,000 alt. Grows naturally in clumps, several roots bunched, with 8--16 flowers. Three for 75c, six \$1.25, Doz. \$2.50.

A. occidentalis. White flowers, cut leaf. 15 in. Silky plumed seedheads. Fall delivery only. Subalpine. Cool, moist, northerly slopes. Light soil. Three for 75c, six \$1.25, Doz. \$2.50.

A. oregana. Pale blue to white flower. 6 in. Woodlands, in rich light loam. Shaded by tree or shrub.

A. lyalli. Like *A. oregana*, smaller, very frail.

Aquilegia formosa. Columbine. Red and yellow flowers on 18-inch stems. Neat, low foliage. Woodlands. Any loam. North side of rock or light shade.

Arabis blepharophylla. Rockcress. Clusters of pink flowers on 12 to 18 in. stems. Low foliage. Rocky hillsides, usually among underbrush. All western *Arabis* require good drainage, loamy or gritty free soil.

A. koehleri. Deep red flowers. Small leaf in rosettes. Stems 6 to 12 in. tall. Evergreen.

Grows naturally in rock crevices only, usually unshaded.
Three for 75c, six \$1.25, Doz. \$2.50.

A. purpurascens. Dark rose flowers on 6 to 8 inch stems. Forms small dark-green mats.

Among rocks and in gravelly soil, in sun, or light shade.

Aster foliosis. (Subalpine form.) Purple rayed flowers on 6-inch stems. Lanceolate basal leaf. From high, open, mountain flats. Gritty, free soil.

Caltha biflora. Marsh Marigold. Large white flower. Reniform leaf. 8 in. Fall del. only.

Subalpine bogs. Constant moisture. Cool location.

Claytonia lanceolata and **C. umbellata.** Very small, pink, Spring Beauty. Doz. \$1. Fall only. Mountain saddles and high glades. Light shade, loam.

Clintonia andrewsiana. Pink or rose flowers in umbel on 18-inch stem. Long basal leaves. Fall only. Three for 75c, six \$1.25, Doz. \$2.50. From Redwoods. Requires deep, acid leaf mold, shade and abundant moisture during growing season.

C. uniflora. Bride's Bonnet. White flower on 6 inch stem. Blue berry. 2 or 3 long basal leaves. Mountain conifer forests. Acid leaf mold, shade, moist.

Cynoglossum grande. Western Hound Tongue. Deep blue, white center ring. Open clusters on 16-inch stalk. Big leaves. Fall only.

Open deciduous woods, among underbrush on foothills. Loamy soil, light shade, moderately moist. Roots deep.

Cypripedium californicum. Lady Slipper. 18 inch leafy stems carrying many white slippers with yellow sepals. Old plants have several stems with 6 to 12 slippers on each stem.

Fall or early April del. Three for 75c, six \$1.25. Cool stream borders, mountain bogs. Rich, sandy, acid loam, light shade, moist. Set crown not over 2 in. deep.

C. fasciculatum. 1 to 4 Brown slippers on 4 to 12 inch stem. 2 large basal leaves. All western Lady Slippers are aromatic. Three for 75c. Woodlands. Leaf mold, light shade, moderate moisture. Drainage must be good. Cover crown less than 2 inches.

Cypripedium montanum. Lady Slipper. 1 to 4 white slippers with brown sepals. 10 in. tall, Fall or early April del. Three for 75c, six \$1.25. Woodlands, throughout foothills. Well drained, light, acid loam, light shade. Set crown not over 2 in. deep.

Delphinium menzeisii. Larkspur. Dark blue flowers in open raceme. Cut leaf. 8 to 12 in. Has small, tuberous root. Six for 50c, Doz. \$1. Varied habitat. Likes rock niche. Any loam, sun or shade.

D. pauciflorum. Pale blue to pink. 12 to 15 in.

D. nudicaule. Dwarf Red Larkspur. Tri-parted foliage. 15 to 18 in. tall. Six for 75c, Doz. \$1.50. Both above Larkspurs grow on rocks, in lower mountains. Any well drained free-soil pocket. Cover crown 1 to 2 in.

Dentaria tenella. Milkmaid. Pink to white.

D. tracyi. Rose. Both grow to 10 inches, and are helpful in giving a natural effect to semi-shaded places. Six for 75c, Doz. \$1.50.

Dicentra formosa. Bleeding Heart. Pink flowers in short racemes. Ferny foliage. Fleshy creeping roots. 8 to 12 in. Placing this plant in poor soil induces a low and compact growth. Open woodlands. Light soil, semi-shade, mod. moisture.

D. glauca. (*D. oregana*.) Cream flowers, tipped with pink or purple. Silvery, finely divided foliage. 10 in. Three for 75c, six \$1.25, Doz. \$2.50. Among rocks on open or brushy mountain slopes. North side of rock, well drained loam, moderate moisture.

Dodecatheon alpinum. Shooting Star or Bird Bill. Clump of long, slim leaves with 8 to 10 inch flower stem bearing 1 to 5 purple blooms.

D. jeffreyi. A larger copy of *D. alpinum*. Both are from mountain meadows, bog and stream edges. Slightly acid soil, sun or light shade, constant moisture.

D. clevelandi. White flowers. 8 in.

D. hendersoni. (*D. latifolium*.) Rose to purple. Both have rounded, flat rosette of leaves, 1 to 5 flowers on erect stem. Both are upland plants. Varied habitat on foothills. Cover crown one inch. Any loam, full sun or light shade.

Epipactus gigantea. Orchid. Leafy stems with pink or rose flowers, yellowish sepals. 18 in. Half-shaded stream edges, near springs, bog margins. Must have constant moisture and prefers a cool location.

Leucocrinum montanum. Sand lily. A clump of grassy foliage, about 8 in. high, with white flowers, set low. Easy and good.

Semi-arid sagebrush lands. Sandy loam, in full sun.

Lewisia rediviva. Montana state flower. Low tuft of erect leaves like short pine needles appear first, followed by large buds on inch stem. On sunny days large pink flowers open.

L. rediviva albus. White flowered variety.

Semi-arid plateaus. Full sun, in well drained sandy soil.

L. nevadensis. Similar to next species, smaller.

L. oppositifolia. Two to four thick, lanceolate leaves, 2 or 3 in. long, prone. White flowers. Moist, open, slopes; mountain meadows. Any drained soil in sun, or north side of rock. Enlarges in rich loam.

Lewisia columbianum. White to pink.

L. columbianum roseus. Dark rose.

Both have small evergreen rosettes of short, flat leaves crowning their fleshy roots.

L. leana. Has a tuft of 2-inch, upright, very slim leaves. Many small, rose flowers on 4 in. stem.

L. tweedyi. Large, creamy flowers, set low in rosette of leathery, 5-in. long leaves. 35c each.

L. cotyledon. Long, smooth leaf. White to pink.

L. finchii. Wide leaf, trifle larger. Pink to rose.

L. heckneri. Toothed leaf. Pale yellow to rose.

L. howelli. Wavy edge leaf. White to dk. pink.

L. howelli, No. 2. Average larger. White.

L. No. 3. Like *finchii*, smaller. Pink shades.

L. No. 4. *Howelli* var, smaller. Pink shades.

All the above group have several 6-inch scapes bearing open heads of large flowers, all having stripes in petals. Evergreen leaves in flat rosettes, topping a long, forked or tapering root. Bitter Root to natives; Oreobroma to botanists.

Found on rock formations, mossy or bare, perpendicular to level, in crevices, niches etc. Usually above 4,000 altitude. Must have good surface drainage, half shade or north side of rock. Avoid clay and rich leaf mold. Rock chips or gravel protects root crown. North slope, or wall, is ideal location.

Mertensia nutans. Branching, creeping root. Stems leafy, 10 inches high. Dense clusters of clear blue flowers, pink tubes. Three for 75c.

M. longiflora. Small bulbous root. 1 or 2 stems about 6 in. tall. Pale to deep blue flowers.

Varied habitat in rather open forests, and brush lands.

Loamy soil, light shade, fairly moist. Likes hillside slope.

M. paniculata. (Alpine form.) 12 in. Open clusters of blue flowers. Thin, ovate leaves.

Alpine meadows. Pool border, bog edge.

Monardella villosa. Mustang Mint. Numerous 8 to 12-in. stems with small oval leaves and a flower-head, purple to pink on each stem.

Rocky foothill slopes, among shrubs, and in open spots.

Good drainage, gritty or sandy soil, sun. Spreads slowly by creeping roots, easily controlled.

Oxalis oregana. Wood Sorrel. Clover-leaf plant with creeping roots. Pink to white flowers.

From Redwoods and conifer forests. A half-hardy, shade and acid-soil lover. At its best on damp, decayed logs.

Paeonia brownii, Wild Peony. Bluish, cut-leaf foliage, 12 in., with large, weird, leathery reddish and yellow globes. Seeds only, fall, 15c.

Widely varied habitat. Sandy loam, north side of rock.

Parnassia californica. Tuft of basal leaves with 8 in. naked stem and large white flower.

Bogs and wet meadows. Wet, acid muck, sun or lt. shade.

Parrya menzeisii. Long basal leaves on deep taproot. Pink flowers. 8 in. Seeds only, fall, 15c.

Semi-arid hill lands. Sandy loam, in full sun.

Pentstemon azureus. Bushy, bluish-leaf plant with blue flowers in spikes. 12 in. high.

P. azureus No. 2. Subalpine form. Smaller.

P. heterophyllus. Narrow gray-leaved, with blue flowers in open raceme. 8 in. alpine form.

P. roezli. Resembles above, more spread out. Hill land species. Spikes of clear blue. 10 in.

P. species. Ovate gray-green leaves. Flowers large, lavender. 10 in. Subalpine, rock plant.

P. menzeisii. Alpine, rock plant. Light green, oblong leaf. Purple flowers. 6 in.

This group are fairly reliable in any well drained free soil. North side of rock for the alpines, others sun or lt. shade.

Pentstemon rupicola. Alpine rock plant. Low, matted plant with small blue-green leaf and red flowers. Slow growing. Three for 75c. Good drainage. half-shade or north side of rock.

P. procerus. Mountain meadow form. Basal rosettes of lanceolate leaves. Blue flowers in cluster on 12-inch stems.

Good in any moist to wet place, full sun or light shade.

P. deustis, yellowish, and **P. diffusus**, blue, are not recommended. I have them, if wanted.

Phlox adsurgens. Creeping roots, decumbent vine-like, leafy stems and large pink flowers.

Open, parklike conifer forests, on lower mountains.

Well drained, sandy loam-and-pineleaf-mold, half shade.

Phlox douglasi. Low mats composed of many short stems with very narrow little leaves and covered with white, pink or lilac flowers.

This type of mat-phlox is found thruout the mountains, on rocky saddles, benches and talus slopes, usually in open, occasionally in conifer forests. They are deep-rooted, the roots under rock, or in deep crevices, the plant spreading on the rock surface. They are slow growing, also slow in recovering when moved---water thoroughly several times.

The two species above are "easiest."

P. douglasi var. caespitosa. Hairy, gray-green foliage. White to pink flowers. Mat forming.

P. longifolia. A few weak stems, bearing long slim leaves and large pink flowers. 12 in.

P. speciosa. A slightly shorter leafed copy of *P. longifolia*. 8 in. Both pink, in varied shades.

Found in open conifer timber, and brush lands, on lower mountains. Usually in half shade, roots under rock or log, in somewhat acid, well drained loam. Slow growers.

Polemonium carneum. Jacob's Ladder. Pinnate foliage, massed, topped with many, large, salmon-pink flowers. 12 in. Said to be short-lived; I have plants over seven years old.

Among tall shrubs on lower mountains. Needs rich loam and half shade, moderate moisture. Best of the tribe.

P. humile. Creeping root, pinnate foliage, blue to white flowers. 10 in. Forms colonies.

Subalpine. Semi-shaded glades in conifer forests.

Loamy soil, light shade, fairly constant moisture.

Ranunculus glaberrimus. Desert Buttercup. A neat little plant with three-cleft leaves and bright yellow flowers. 4 in. Any drained place.

Ranunculus species. Deep-rooted, large incised leaf, large Buttercups. 12 in. Not for small rock gardens. Good on bog edge, or pool border.

Romanzoffia sitchensis. Delicate little rock-cover with scalloped leaves, white flowers. 5 in. Moist cliffs, or steep northerly facing rock slopes. Gritty loam, light shade, constant moisture.

Saxifraga caespitosa. Very small leaf rosettes, closely crowded, covered with white flowers. Grows in moss, on well drained, half shaded, rock bluffs. Appears to be dead when dormant. Likes north face of mossy rock, shaded, well drained. I have some growing well, so placed, now over six years old.

Saxifraga tolmei. Odd, thick little leaves on a mass of short stems bearing queer star flowers of yellowish-white. 5 in. Alpine. Fall del. only. Under overhanging rocks, on steep slopes, just below the July-August snow line. Soil wet, cold. For experimenters. Also have **Pinguicula vulgaris.** Dark violet flowers on 3-in. stems, small oblong leaf. From serpentine rock cliffs, wet in spring. dry in summer. For experimenters. Can also supply **Dicentra uniflora.**

Scutellaria angustifolia. Skullcap. Creeping roots, 8-inch leafy stems with pairs of small blue flowers in leaf axils. Spreads by roots. Any drained pocket, low down, away from weaker plants.

Sedum douglasi. Mossy, erect, yellow flowers. Foothills. Will succeed anywhere in rocks. Spreads.

S. obtusatum. Coppery colored leaves, matted rosettes, cream flowers on 6-in. stems.

S. species. Grayish, angular leaf in half-open rosettes, matted, cream flowers on 8-in. stems. Both root in small soil pockets on rocks. Subalpine. Good drainage, loamy soil on rock base, half shade.

S. oregonom. 3-inch stems with scattered, small round leaves, yellow flowers. Odd appearing.

S. purdyi. Small changeable-green leaf rosettes with offsprings attached by runners, sort of net-work mat, yellow flowers on 6-in. stems.

S. species 2. Var. of above. Powdered white.

S. species 3. Var. of *purdyi*. Pea-green rosettes.

S. spathulifolium. Slightly larger, gray-green rosettes, mat form, yellow flowers.

These need good drainage, half-shade, north slope is best.

Sidalcea spicata. Wild Hollyhawk. Large lobed basal leaves, with smaller-leaved upright stems bearing spikes of half-inch pink flowers. 2 ft. Varied habitat. Sandy loam, full sun or light shade.

Silene californica. Indian Pink. One to several upright, leafy stems tipped with crimson flowers. Up to 24 in. All *Silenes* are deep rooting.

S. hookeri. Several floppy stems radiate from crown, leafy, 4 to 8 inches long, tipped with big pink flowers. Improves as it ages.

S. hookeri 2. Dark pink flowers.

S. pulverulenti. Similar plant. White flowers.

S. species. Similar plant. Flowers larger, with finely cut petals, white. Subalpine.

Widely varied habitat, at edges of conifer forests. Roots must be placed vertical, with crown covered 2 to 3 inches. Well drained sandy loam, full sun or light shade. Soils in which these plants grow best are somewhat acid.

Sisyrinchium bellum. Blue-eyed Grass. 10 in. Grass-like clumps, sprinkled with blue flowers.

S. grandiflorum. Large lilac to purple flowers, near the top of 8-in stems. Grows in clumps. Thruout foothills, in clay loam to heavy clay. Sun or light shade. Best plants are from heavy clay loam.

Sprague multiceps. Pussy Paws. Flat rosettes topping deep tap root. Semi-erect to prone stems bearing varying pink flower-heads.

Open mountain saddles and glades, in deep, light soils. Well drained sandy loam, light shade. None too reliable.

Thlaspie alpestre. Penny Cress. Small mound of basal leaves, white umbels on 4-in stems.

Lower mountain slopes. Any drained loam among rocks.

Violas. Wild Violets. Best are (x) marked. All violas 20c each, 3 of one kind 50c, doz. \$1.50.

xViola beckwithii. Cut leaf, tri-color. Upper petals dark blue, lower 3 petals pale blue, center yellow. 4 in. Mountain form.

xV. chrysantha. (*V. douglasi*.) Cut leaf, bi-color. Bright yellow face, back of upper petals dark mahogany. 5 in. From semi-desert lands.

Gritty or sandy loam, built up or raised a little to insure good surface drainage. full sun or north side of rock,

- xViola hallii.** Cut leaf, bi-color. Upper petals dark purple, lower petals cream. 4 in.
Varied habitat. Sandy loam, full sun or light shade.
- xV. adunca.** Rounded leaf, blue flowers. 5 in.
Woodlands. Half-shade, fairly light loam.
- xV. praemorsa.** Long upright leaf, large yellow flower. 4 to 6 in. Best native yellow species.
Brushy foothills. Loam or clay loam, half shade or sun.
- xV. occidentalis.** Long upright leaf. White, 5 in.
Grows only in bogs, Sun or light shade.
- V. cuneata.** Creeping root, ovate leaf. Upper petals purple on back, paler face. Lower petals white, with dark central zone. 4 in.
Open hill slopes. Gritty loam, sun or light shade.
- V. ocellata.** Resembles *cuneata*, larger. 6 in.
Conifer forests. Rich loam, shade. None too reliable.
- V. glabella, purpurea, sheltoni* and *lobata* are yellow flowered woodlanders. *V. howelli* and *palustris* are blue to white, woodlanders. *V. blanda*, white, bog plant. Can supply others from Oregon-Northern California only.

FOLIAGE PLANTS.

Postpaid prices: 20c each, three of one kind 50c,
dozen of one kind \$1.50, dozen mixed \$2.

- Asarum caudatum.** Ginger. Large dark green leaves, odd brownish flowers. Aromatic. 8 in.
- A. hartwegi.** Variegated leaf. Both creepers.
Shady woods, in rich pine-leaf mold, moist.
- Heuchera micrantha.** Long creeper roots, large incised leaves, massed. Tiny flowers on thin naked 15-in. stems. Likes steep rocky slopes.
- H. micrantha--variegated.** Var. of above.
- H. cylindrica.** Smaller green leaves. Yellowish green flowers on 12-in. stems. Rock bluffs.
Heucheras are especially useful as temporary fill-ins here and there, being easily suited, easily moved and easy to divide. Fine for erosion stoppers. Prefer half-shade.
- Micromeria douglasi.** Small mint-scented vine with slow-creeping roots. Evergreen. 2 ft. long.
Loamy soil, light to heavy shade. Best used as drapery on slopes, ground cover over large bulbs, etc. Easy.

Linnaea borealis. Twinflower. Small creeping stems with tiny glossy-green evergreen leaves and pairs of small bell-shaped pink flowers. Conifer forests. Rich acid loam, shade, moist.

Synthiris rotundifolia. Makes a leafy mound with clusters of tiny blue flowers on short stems. Foliage turns reddish in frost. 6 in.

S. sweetseri(?) Smaller leaf, more open plant, similar blue flowers. Both have notched leaf. Open forests. Easily grown in any loam, light shade.

Vancouveria hexandra. Insideout flower. A slow spreading, shallow rooted near-evergreen with upright 6 or 8-in. stems carrying angular pinnate leaflets, and a few loose racemes of tiny inverted flowers. Open conifer forests. Rich loam, somewhat acid, light to medium shade, moist.

V. chrysantha. Similar to above, with larger bright yellow flowers. Open woods, hillsides. Any well drained light soil, half shade. Cover the roots about two inches. Slow starting, wet well several times.

Ceanothus prostratus. Squaw mat. Shrubby evergreen mat with tiny holly-leaves. Small blue flowers in heads. Young plants, 30c each. Pine forests. Deep loamy soil, half shade. Unreliable.

SMALL FERNS.

Postpaid prices: 30c each, three of one kind 75c.

Ceropteris triangularis. Gold Fern. Clump of thin wiry 3-in. stems with triangular fronds on tip-end. Curls up in dry spells, revives in wet. Various rock niches, usually in sun. Light loam pocket.

Cryptogramma acrostichoides. Rock Brake. Dense clumps, 4-in. stems, finely cut fronds. Sunny or half-shaded niches. Looks dead in dry weather.

Pellaea densa. Cliff Brake. Small, close packed fronds 3 to 5 in. high. Curls up when dry. Half shaded rock crevices. Full sun in cool location.

Pellaea brachyptera. Cliff Brake. Resembles a clump of miniature fir trees. 8 in. Place in upright position, well drained, half-shade pocket.

Polystichum lemmoni. Shasta Fern. Compact mass of evergreen fronds. 6 to 8 in. Alpine. Roots under north side of rock. Likes northerly slopes.

WILD BULBS.

Delivery: Sept. 1 to Nov. 1. Only mature bulbs are sold. Plant at once on receipt. New growth starts, naturally, early in autumn.

WILD ONIONS.

Allium acuminatum. Grass leaf. Small heads of deep pink flowers on upright 8 in. stem.

A. bolanderi. Small white heads on 8 in. stem.

A. falcifolium. Scythe-shape leaves. Dark red heads, short stem, showiest. Alliums 50c doz. Any well drained soil in full sun. Cover bulb one inch.

BRODIAEA. (TRITELEIA, HOOKERA.) GRASS NUTS.

Brodiaea coccinea. Firecrackers. Grass leaf. Wiry 18-in. stem topped with a drooping bunch of crimson cylinders with pale green tips. A remarkable flower. Each 10c, doz. 75c. Set 3 inches deep in well drained light soil, half shade.

B. bridgesii. Deep violet to blue, large, flowers in open cluster on 18 in. stems. Grass leaf. From coast rainy belt, sandy loam, light shade. 3 in. deep.

B. douglasii. Open heads of china blue. 18 in. Mountain meadows. Bulbs go deep, 5 in., moist, sun.

B. grandiflora. A few large, dark purple flowers upright on 10 to 14-in. stems. Among the best. Any garden soil, well drained. Set bulbs 3 in. deep.

B. hendersoni. Yellow flat-open flowers with purple center-stripe. 10 to 14 in. Best yellow. Likes half-shade, sandy loam, bulbs 4 in. deep.

B. laxa. Good blue flowers in heads. 18 in. Any drained garden soil, sun or half shade. 3 in. deep.

Unless otherwise priced, 6 one kind 25c, doz. 50c.

Also have *lactea*, white, *ixioides*, yellow, *multiflora*, blue and *capitata*, commonest blue.

CAMASSIA. CAMASS. QUAMASH.

Camassia leichtlinii. Long grass leaf, spikes of dark blue to white flowers. Up to 3 ft. tall.

C. quamash. Very similar. Six 40c, doz. 75c. Both vary in height, from 1 to 3 ft., as to fertility of soil and amount of moisture available. Heavy black clay produces dark blues, also manganese soils. Any camass can be dwarfed in a raised pocket of light soil, or supersized in rich, deep clay-loam, abundantly moist. Sun, 5 in. deep.

NATIVE *dry land* LILIES.

Lilium bolanderi. 1 to 8 nodding, crimson to purple thimble-shape lilies. 3 or 4 leaf whorls on 12 to 30 inch stem. 30c each, four for \$1.

Likes well drained, rocky slopes, or mounds, in gritty or sandy loam, full sun or light shade. Found up to 6,000 alt.

L. columbianum. 1 to 12 small, recurving, red-orange, flecked purple. Scattered and whorled leaves on 18 to 36 in. stem. 20c each, 3 for 50c.

Southern Oregon form, grows much larger in coast rainy belt---Portland, Ore., Seattle, Wn. Drained, sandy loam.

L. washingtonianum. 1 to 25 large, drooping, fragrant lilies. Waxy white, flecked, darkens as it ages. Wavy leaf whorls on 2 to 6 ft. stem. Known locally as Mt. Hood lily.

Shasta lily. Minor differences from above.

L. rubescens. Slightly smaller, lilies set erect.

These three are all fragrant. 25c each, five \$1.

Found on mountain slopes, among shrubs and scattered trees, always in well drained light loams. Often the best specimens are wedged in among rocks. Set bulbs so the top is covered three times the size of bulb.

NATIVE *wet land* LILIES.

Lilium pardalinum. 1 to 15 orange-red, spotted Tiger lilies. Whorled and alternate leaves on 2 to 6 ft. stem. At its best on stream margins.

L. pardalinum--dwarf. 18 in. to 2 ft. From high mountains, on boggy lake edge.

L. pardalinum roezli. More leafy, longer slim leaf. Crimson, spotted lilies. 3 to 6 ft. Cool stream edges and around boggy springs.

L. parviflorum. Resembles *pardalinum*. From boggy spots around Mt. Shasta.

Above group are 25c each, five of one kind \$1.

All of this group require constant moisture, prefer sandy loam, sun or light shade. Bulbs 4 in. deep. Not exacting.

All Prices Include Postpaid Delivery.
This 1934 list nullifies previous lists.

JOHN H. HECKNER, BROWNSBORO, ORE.

Licensed Nursery. Inspected Stock.

SEEDS

of wildlings ripen from July to end of September. Only fresh, carefully selected seeds are worth the time and care required to grow them. Some wildlings, such as the matted phlox, are near impossible to grow from seed, while many others are no difficult problem. Wild bulb seeds require freezing, and should be planted in autumn. Most of the true alpine and subalpine require fall planting. Arabis and viola are planted spring or fall.

A small amount of seed is collected for sale and for my plantings. Deliveries from August to October. Early (July) orders are appreciated. Packets 15c; double-weight packets 25c. No directions for planting. And *no holdovers* offered.

